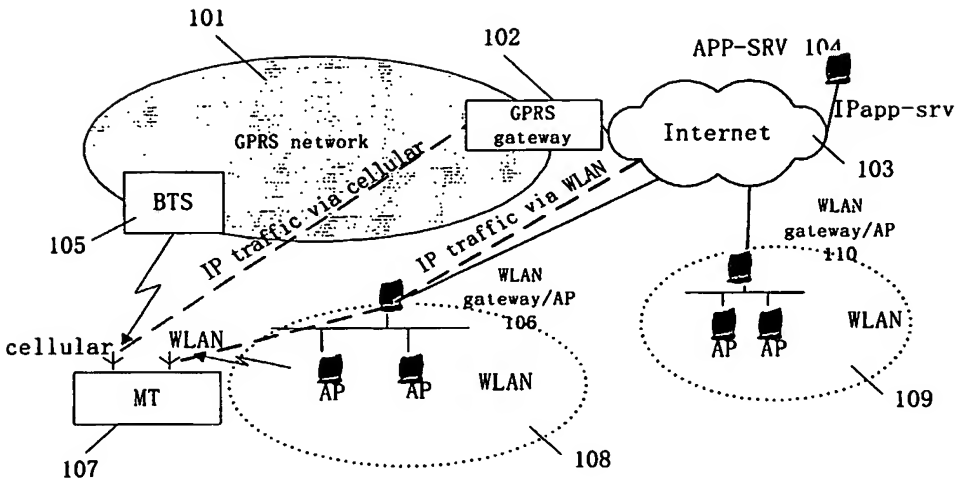
101
102
APP-SRV 104
GPRS network
GPRS gateway
Internet
IPapp-srv
103
BTS
105
IP traffic via cellular
IP traffic via WLAN
WLAN gateway/AP 110
WLAN gateway/AP 106
cellular
WLAN
MT
AP
AP
WLAN
AP
AP
WLAN
107
108
109

Fig. 1

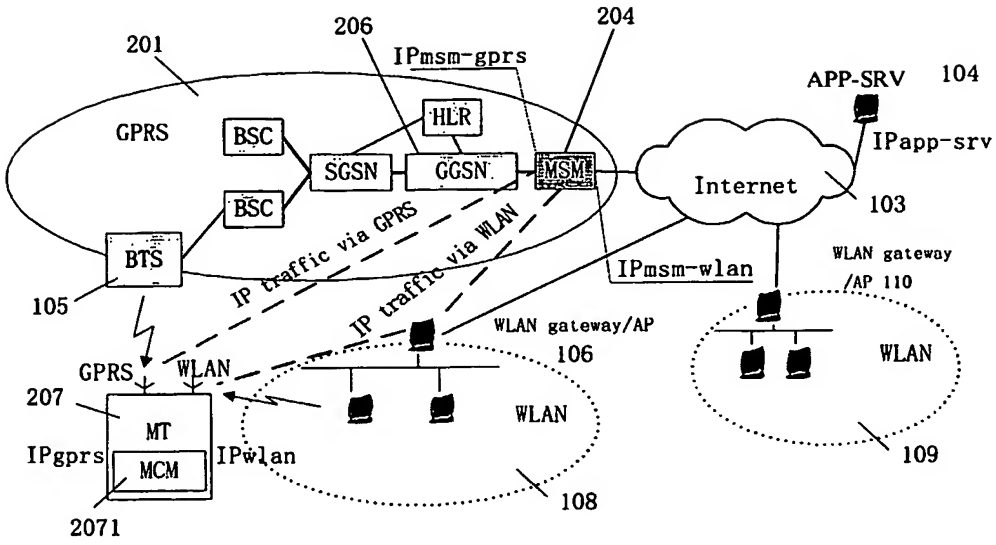
201
206
IPmsm-gprs
204
APP-SRV
104
GPRS
BSC
HLR
SGSN
GGSN
MSME
IPapp-srv
Internet
103
BSC
BTS
IP traffic via GPRS
IP traffic via WLAN
IPmsm-wlan
WLAN gateway
/AP 110
105
WLAN gateway/AP
106
GPRS
WLAN
WLAN
207
MT
IPgprs
MCM
IPwlan
WLAN
109
108
2071

Fig. 2

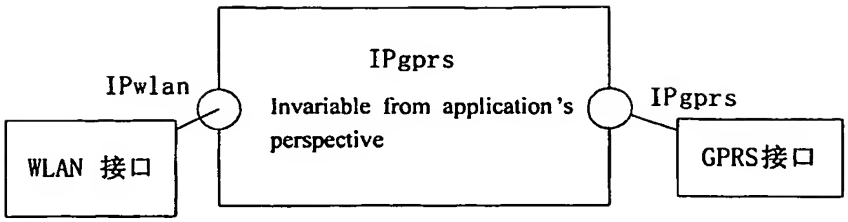

Fig. 3

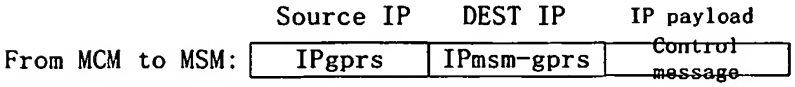

Fig. 4A

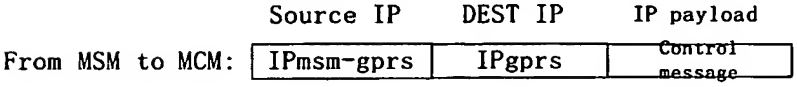

Fig. 4B

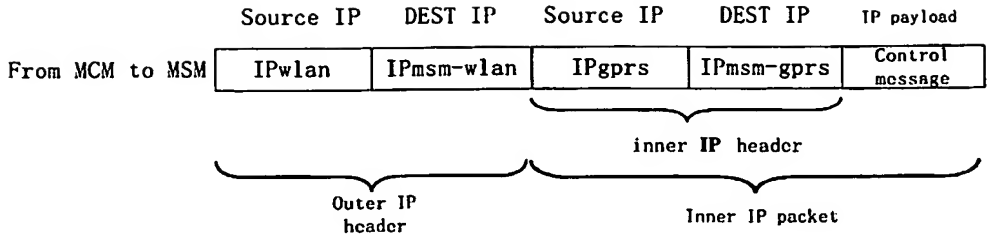
Source IP
DEST IP
Source IP
DEST IP
IP payload
From MCM to MSM
IPwlan
IPmsm-wlan
IPgprs
IPmsm-gprs
Control message
inner IP header
Outer IP header
Inner IP packet

Fig. 5A

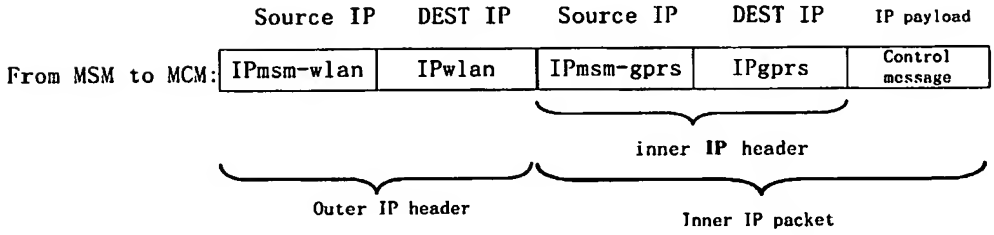
Source IP
DEST IP
Source IP
DEST IP
IP payload
From MSM to MCM:
IPmsm-wlan
IPwlan
IPmsm-gprs
IPgprs
Control message
inner IP header
Outer IP header
Inner IP packet

Fig. 5B

MT index (or MSISDN)	IP_{gprs}	IP_{wlan}
1	130.23.3.7	Invalid address (means MT out of WLAN)
2	130.23.3.8	202.1.2.100
...	...	

Fig. 6

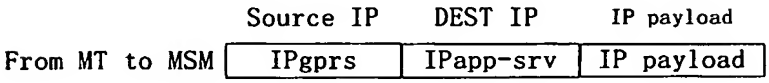

Fig. 7A

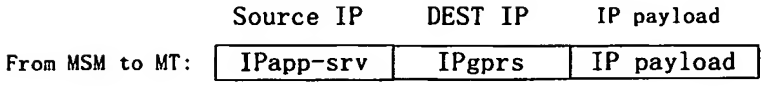

Fig. 7B

BEST AVAILABLE COPY

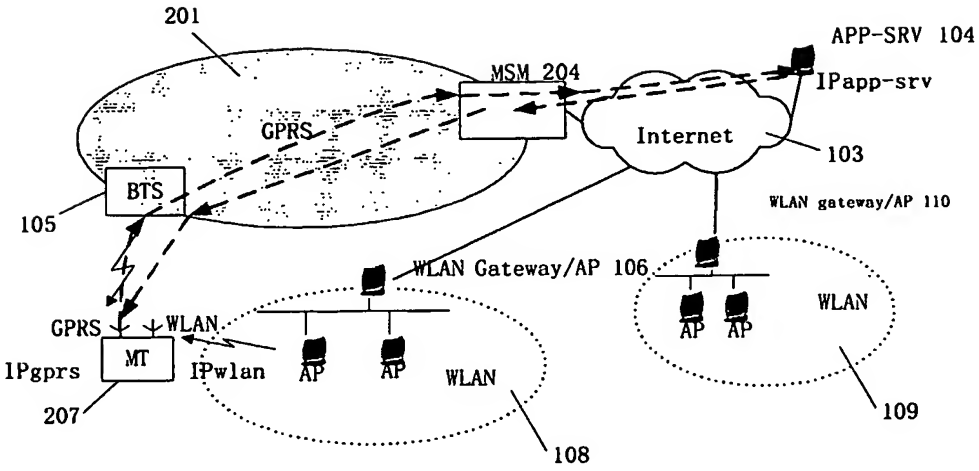

Fig. 8

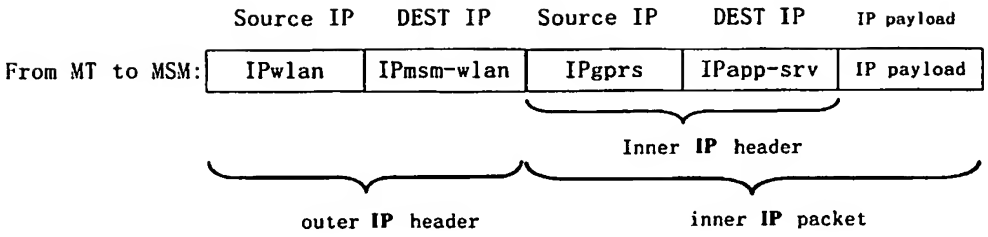
Source IP
DEST IP
Source IP
DEST IP
IP payload
From MT to MSM:
IPwlan
IPmsm-wlan
IPgprs
IPapp-srv
IP payload
Inner IP header
outer IP header
inner IP packet

Fig. 9A

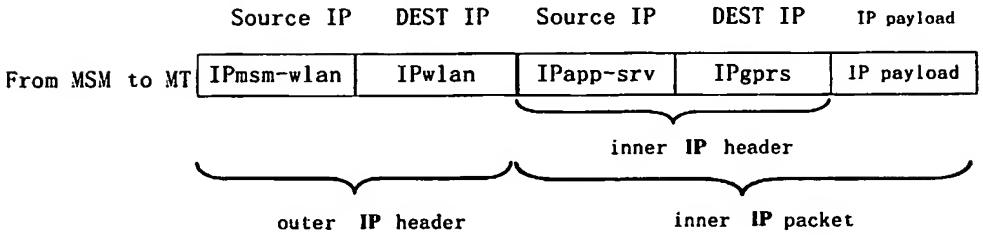
Source IP
DEST IP
Source IP
DEST IP
IP payload
From MSM to MT
IPmsm-wlan
IPwlan
IPapp-srv
IPgprs
IP payload
inner IP header
outer IP header
inner IP packet

Fig. 9B

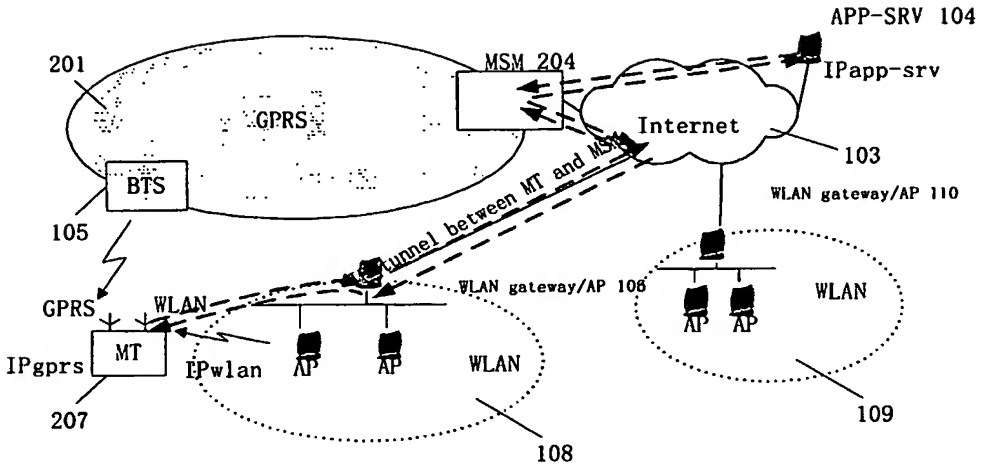
APP-SRV 104
IPapp-srv
201
MSM 204
GPRS
Internet
103
BTS
WLAN gateway/AP 110
105
Tunnel between MT and MSM
WLAN gateway/AP 106
GPRS
WLAN
WLAN
AP
AP
IPgprs
MT
IPwlan
AP
AP
WLAN
207
109
108

Fig. 10

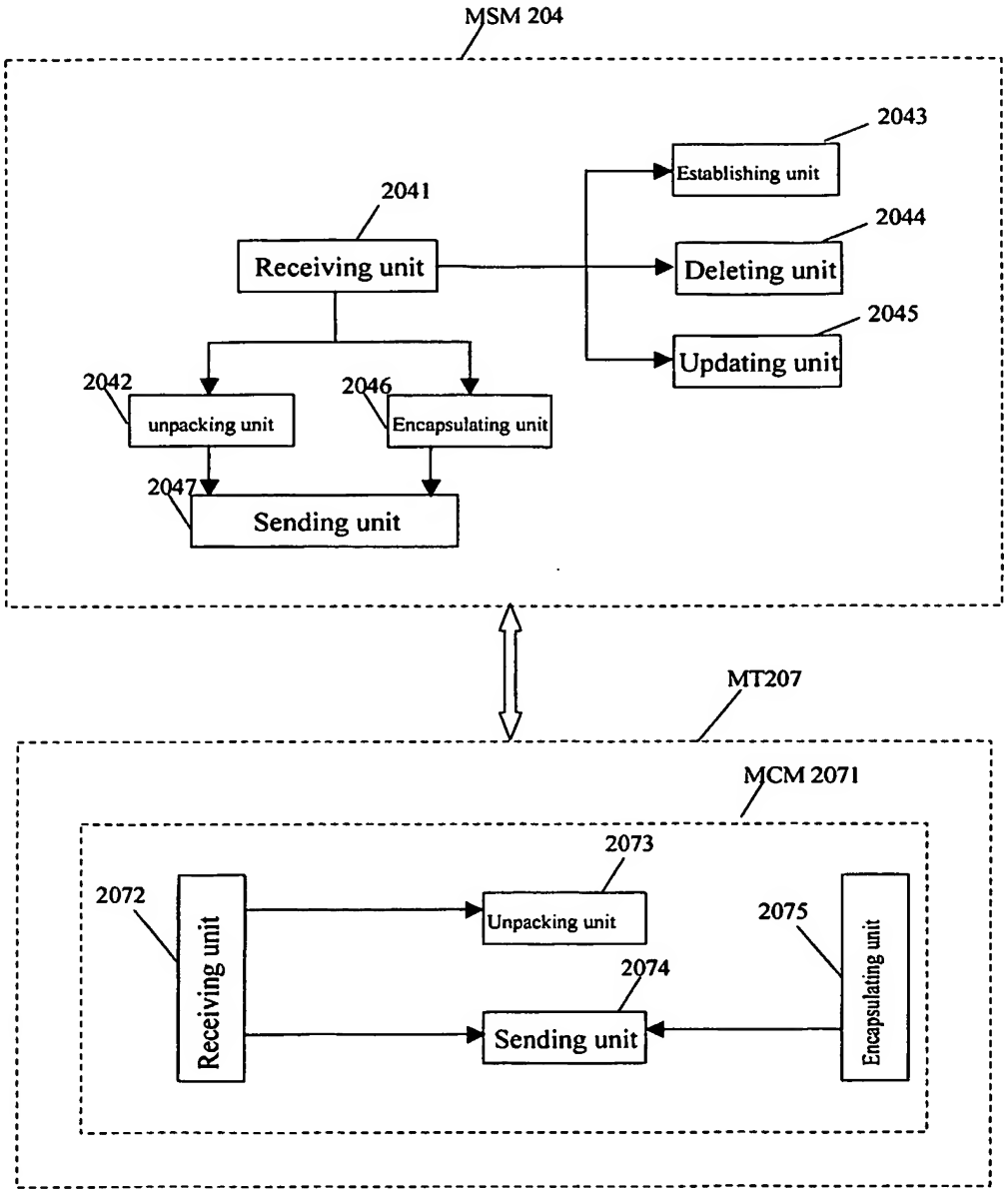
MSM 204
2043
Establishing unit
2041
2044
Receiving unit
Deleting unit
2045
Updating unit
2042
2046
unpacking unit
Encapsulating unit
2047
Sending unit
MT207
MCM 2071
2073
2072
Unpacking unit
2075
Receiving unit
2074
Sending unit
Encapsulating unit

Fig. 11